Appendix 2. Storylines.

Paper 1: Sustainable land-use practices in European mountain regions under global change: *An integrated research approach (accepted 29.10.2012).*

The introduction to the Special Feature was based on the original (Mountland) workplan that had been funded by the CCES in 2008. The workflow (Figure 2 in the manuscript) had been used to present (Mountland) at several conferences and meetings before the idea of this synthesis was developed (1). In addition, the vision of the synthesis developed at the workshop in May 2011 helped to focus the outline and content of the manuscript (6). The researchers agreed on the added value of the Special Feature to base all contributions on either inter- or transdisciplinary collaborations. The internal review (8), however, was a difficult task for two reasons: a) the co-authors (and leaders of the project) had limited time resources to review the text; and b) the other authors were fully involved in the preparation of their own contribution to the Special Feature. As a consequence, they did not carefully review the summary of their own manuscripts in the introduction. A further challenge was that the summaries of the special feature's papers had to be written before all of the papers were ready for submission (7).

Paper 2: Dynamics of forage production in pasture-woodlands of the Swiss Jura Mountains under projected climate change scenarios (accepted 15.10.2012).

In the initial (Mountland) workplan, this contribution was planned as a synthesis paper of Konstantin Gavazov's PhD work (1), which had a focus on an ecological experiment. The linkage of experimental data with the ecological modelling, however, gave rise to interdisciplinarity and the synthesis character. The timeline with respect to the Special Feature accelerated the work on this manuscript (6). This, however, asked for some flexibility with respect to the organization of Konstantin's work (4) since the original idea was to publish this manuscript after he had written his disciplinary contributions. Moreover, the linkage was only possible with the help of Alexander Peringer (modelling), François Gillet (adviser, internal reviewer), Thomas Spiegelberger (reviewer) and Alexandre Buttler (adviser, reviewer) who provided important input to the manuscript within a short time frame (4,5). The parallel work on paper 3,4 and 5 helped to focus (and distinguish) the content of the manuscript (2). For this contribution, however, the parallel work on different (inter-)disciplinary manuscript had also a disadvantage. For the individual success of Konstantin's PhD, it would have been much better if he wouldn't had been rushed to work on his synthesis before he actually published his individual/disciplinary work (2). One of the Figures in the original synthesis (Paper 10) that was based on Konstantin's data had to be removed because it would have precluded one of his individual papers.

Paper 3: A contextual analysis of land-use and vegetation changes in two wooded pastures in the Swiss Jura Mountains (accepted 26.9.2012)

This manuscript was planned as one chapter of the ECOS PhD candidate (Katy Lannas). Thus, it was originally planned before the synthesis was developed. Katy, however, stopped working on her PhD because of health reasons (1). Thus, Michael Kalbermatten stepped in for 6 months to work on the data analysis (4). The synthesis workshop in May 2011 showed that this work would fit very well in the Special Feature (6). This accelerated the development of the manuscript. The flexibility and availability of the lead author (Joel Chételat) and the different co-authors (François Gillet, Alexander Peringer, Alexandre Buttler) allowed to focus the outline of the contribution and to effectively write the manuscript (4,5). The results from this manuscript were an important input for paper 4, which was written later on. Thus, the coordination of results between the two contributions to the Special Feature emerged as difficulty and restrained an early completion of the manuscript (7). At the same time, however, the parallel writing of the other manuscripts helped to confine the content of the manuscript (2).

Paper 4: Past and future landscape dynamics in pasture-woodlands of the Swiss Jura Mountains under climate change (accepted 22.1.2013)

As in the case of paper 3, this work was originally planned to be part of Katy Lannas's PhD who quit for health reasons (1). At the synthesis workshop (October 2012), we realized that this contribution would be a helpful part of the Special Feature (6), because it outlined fundamental landscape ecological dynamics, which had not been published before and therefore would have been available as references in manuscripts 2 and 3 and 5. Without the flexibility to hire Alexander Peringer (available funds) (4) and his fast development / advancement of the model with the help of François Gillet and Alexandre Buttler (5), the contribution would not have been possible. Since the contribution was using input from paper 2, the coordination between the two manuscripts was challenging and delayed paper 2 (7). Still, the manuscript greatly profited from the collaboration within the whole ECOS group and their contributions (2).

Paper 5: Modelling social-ecological feedback effects in the implementation of payments for environmental services in pasture-woodlands (accepted 19.12.2012)

This contribution originated in the idea to combine the findings from the natural science and the social science part in the Jura, developed at the workshop in May 2011, and initiated by the coordinator being already familiar with the research in the Jura case study (6). It necessitated extending the land use model as well as collecting additional data, thus asking for a lot of flexibility. With the help of a master student and the availability of the (Mountland) coordinator to write a first draft (4), the intensive collaboration between the disciplinary groups could be established (5). However, this flexibility came with costs. The work was planned ad hoc and the conceptual framework had been elaborated in parallel with the model implementation (7). In addition, the very interdisciplinary character of the manuscript and the short time frame made a coordination of the internal review difficult. Co-authors focused on their individual paragraphs within the manuscript rather than the contribution as a whole. (8). During the review process, the parallel writing of other manuscripts (and the revisions of the Jura papers in general) helped to improve the quality and the focus of the manuscript (2). Still, the coordination between the two model outputs was challenging due to limited time resources. There was always just a relatively small time window to exchange data (7). The lead and coordination of the subject editor was another important aspect (9). Without the concise and helpful comments of the subject editor who had a clear idea about the potential of earlier versions of the manuscript, a successful publication would not have been possible. The subject editor was able to give advice that helped to bridge the gaps that emerged from the ad hoc implementation of the conceptual framework elaborated in this context (two different time horizons in the models). The manuscript was revised four times before being accepted by the subject editor.

Paper 6: Constructing Consistent Multi-Scale Scenarios by Transdisciplinary Processes: The Case of Mountain Regions Facing Global Change (accepted 15.10.2012)

This manuscript was planned as one chapter of the NSSI PhD candidate (Julia Brändle). Thus, the data collection and workshops for this transdisciplinary manuscript were available and based on the parallel work in (Mountland) as planned in the initial proposal (1,2,6). Since the outline of the manuscript was ready, the authors had enough time to coordinate an intensive internal review of the manuscript with other researchers and with stakeholders (8). In addition, this contribution was very well targeted to the chosen journal for the Special Feature (6).

Paper 7: Trade-offs between ecosystem services in a mountainous region (accepted 10.3.2013)

This manuscript was planned as one chapter of the AFEE PhD candidate (Simon Briner). The outline of the manuscript was defined before the workshop in May 2011 (1). The writing of the other chapter of Simon's PhD helped to focus the outline and content of the submitted manuscript (2). However, the first chapter of Simon's PhD (the description of the model) had some parallels to this contribution, and was published quite some time before the submission deadline (2). One of the reviewers doubted the added value of this manuscript. The subject editor (with a encompassing view on the Special Feature) managed to align the reviewer's claims and the authors' possibilities to adjust the manuscript (9). To accentuate the differences between the two chapters, the 〈Mountland〉 coordinator joined the author team after the second review. The additional author brought a) a new idea what the existing manuscript adds to the Special Feature (6), b) additional inputs from the parallel writing of the synthesis paper 10 (5); and c) the flexibility (time resources) to revise the manuscript (4).

Paper 8: Combining Policy Network and Model-Based Scenario Analysis: An Assessment of Future Ecosystem Goods and Services in Swiss Mountain Regions (accepted 19.12.2012)

As in the case of paper 5, the idea of this contribution emerged from the workshop in May 2011 with a clear focus on the Special Feature (6). In contrast to paper 5, however, there was a clear plan on how to integrate the two disciplinary approaches (6) and their results (7). The composition of the team allowed for an efficient, interactive writing process (5). However, the reviewers came from a specific research field and asked to focus the manuscript on one discipline only (10). The subject editor put a lot of effort to convince the reviewers to keep both approaches in an interdisciplinary way in the manuscript (9). In addition, the parallel writing (especially the contributions with a focus on modelling) helped to improve the quality of this contribution (2). In the end, time restrictions (and to a lesser extent also the limited length of the paper i.e. word count) did not allow for a full elaboration of the potential of the original idea (which was also criticized by one of the reviewers) (4).

Paper 9: Integrating expert knowledge into mapping ecosystem services tradeoffs for sustainable forest management (accepted 4.4.2013)

At the beginning, this contribution was not planned to be part of the Special Feature. Thus, it was based on earlier work parallel to the synthesis (1). At the synthesis workshop in October 2011, we decided to integrate this contribution into the Special Feature because a) it contained a valuation of Ecosystem Services (additional dimension of the <Mountland> work) and b) it

was based in the case study region Davos which otherwise would have been absent in the Special Feature (6). The reviewer was very skeptical about the submitted version of the manuscript, leading to a long list of comments. With a focus on the whole Special Feature, the subject editor asked the editor in chief whether the authors could re-submit a new version of the manuscript (9). Based on the extremely valuable inputs of the reviewer (10), the authors completely revised their contribution. This was only possible because a person at PLUS had time and the corresponding experience to write a new version of this manuscript (4,5).

Paper 10: Sustainable land-use in mountain regions under global change: synthesis across scales and disciplines (accepted 24.1.2013)

The funding for a synthesis was cut by CCES in the initial proposal. Thus, there was no plan on how to realize the synthesis of the project. At a later stage, CCES decided to fund synthesis proposals. We developed the idea of different Special Features as synthesis output of (Mountland) (6). Based on our vision CCES provided additional and crucial funding for the synthesis (flexibility with respect to money) (4). Moreover, the possibility to extend the appointment of the senior scientists (postdoctoral researchers) allowed maintaining the knowhow from the different research projects (5). In addition, we developed a methodological plan on how to summarize and synthesis our work based on the publication by Seppelt et al (2012) and organized a synthesis workshop. However, the coordination of results remained a major challenge since some of the PhD results were not available at that point in time (autumn 2011) (cf. paper 1). Thus, important results (e.g. avalanche land-use interaction from Davos) were not part of the synthesis (7). In addition, co-authors strongly focused on their contributed paragraphs rather than to revise the whole manuscript (8). This resulted in a long synthesis that was judged by the reviewer as a very long list but not actually as a synthesis. The very helpful comments of the reviewer helped to focus the synthesis considerably (10). The manuscript was shortened by 20%. In this context, the parallel writing of synthesis articles for the Schweizerische Zeitschrift für Forstwesen and Agrarforschung helped to focus and improve the conclusions from our work (2). Again, the methodological background given by Seppelt et al (2012) and other reviews, i.e. a plan on how to proceed, formed an important basis for the writing of the final manuscript (6). At the end, however, time resources from the professors and senior scientists (i.e. most of the co-authors) were still limited to realize a throughout internal review of the manuscript (8).